

## **SUBJECT: AVIAN INFLUENZA**

### A) Understanding **Epidemic Avian Influenza** vs. **Pandemic Influenza** (avian source)

Public health officials around the world are addressing concerns of a **potential** major worldwide **pandemic** of flu involving people.

Animal health officials around the world are addressing concerns of an **existing** worldwide epidemic of **avian influenza involving wild birds** and **domestic poultry**.

### B) Avian Influenza Epidemic

- Various types of influenza have historically occurred in birds around the world. The type A influenzas of concern in birds involve (15) H antigen types and (9) N antigen types.
- Pathogenicity is defined by the antigen type, other protein components of the virus, and lethality of the virus when introduced to neonatal chicks.
- Pathogenicity in birds is classified as Low (LPAI) or High (HPAI).
- H<sub>5</sub> and H<sub>7</sub> types of AI virus have particular tendencies to change from low path to high path when occurring in poultry or wild bird populations.
- H<sub>5</sub> N<sub>1</sub> is a type of HPAI first seen in East Asia in 1996.
- Since 2003, H<sub>5</sub> N<sub>1</sub> has rapidly spread from Southeast Asia to over 40 countries including Asia, Africa, and Europe.
- Maps of this outbreak are very reminiscent of the serotype O Foot and Mouth Disease spread in 2001-2002!
- H<sub>5</sub> N<sub>1</sub> HPAI differs from FMD in that it can be spread not only by movement of animals and producers, but also by migratory birds.
- H<sub>5</sub> N<sub>1</sub> HPAI has also shown the ability to infect people. (Thus far only people who have very close contact with infected birds).
- H<sub>5</sub> N<sub>1</sub> HPAI appears to be a very serious and often lethal flu in people.
- Public Health concerns involve the potential for this H<sub>5</sub> N<sub>1</sub> HPAI to change to the extent it readily spreads from person to person, resulting then in an inevitable PANDEMIC Flu of People.
- Animal Health officials are attacking this disease in birds
  - (1) To **prevent** the tremendous **losses to the poultry** and wild bird sectors.
  - (2) To **prevent the ongoing presence of the virus and its opportunity then to change**, becoming a human disease and **causing a pandemic**.
- This will **NOT** be the **last and only** influenza virus to present this type of threat, but it is the **existing** threat around the world today!

### C) Addressing Epidemic Avian Influenza

- (1) Assist those areas of the world where H<sub>5</sub> N<sub>1</sub> occurs in attempts to reduce the risk of it coming to the United States.
- (2) Restrict imports of birds and products at risk from those areas affected with avian influenza.
- (3) Tighten import restrictions on all birds, including pet birds entering the United States; testing and quarantine.
- (4) Prevent smuggling of pet birds into the United States.
- (5) Greatly enhance surveillance of migratory waterfowl to provide “early warning” of entry of the virus into our country via this route.

- (6) Greatly expand and enhance surveillance for AI in live bird markets, backyard birds, non-domestic birds, and exhibition poultry.
- (7) Expand and enhance surveillance in all classes of the domestic poultry industry.
- (8) Stockpiling effective avian H<sub>5</sub> vaccine for use if a “stamping out” policy is impractical.
- (9) Follow established and successfully used “stamping out” plans for any H<sub>5</sub> or H<sub>7</sub> type influenza in domestic poultry and privately owned birds. This involves rapid response by trained and equipped teams of federal and state regulatory staff.

D) Addressing Public Health Concerns:

- (1) The highly pathogenic H<sub>5</sub> N<sub>1</sub> is NOT currently in the Americas!
- (2) H<sub>5</sub> N<sub>1</sub> remains a disease of birds (a few human infections reported in areas with very close proximity between birds and people).
- (3) The virus has not changed to be able to spread from people to people.
- (4) Routine reporting and sanitary precautions should be applied when handling sick birds.
- (5) Therefore, **to date, there is not a health concern to the general public.**

E) Addressing Food Safety

- (1) H<sub>5</sub> N<sub>1</sub> is highly pathogenic to poultry and will be detected should it enter commercial flocks.
- (2) Poultry inspected for food will not present a food safety risk.
- (3) H<sub>5</sub> N<sub>1</sub> WILL NOT spread to people through properly handled and cooked poultry food product. **Poultry meat and eggs are safe to eat.**

F) Further Considerations:

- (1) The U. S. poultry industry conducts surveillance for AI routinely and has for years.
- (2) Low Path AI has been detected in U. S. poultry historically and eliminated.
- (3) High Path AI has been detected in U. S. poultry several times and has been quickly eliminated (most recently H<sub>5</sub> N<sub>2</sub> in Texas in 2004).
- (4) U. S. poultry industry is intensely managed and practices the principles of biosecurity as routine management.
- (5) Should H<sub>5</sub> N<sub>1</sub> be detected in migratory waterfowl:
  - a) This does not mean it will affect domestic poultry.
  - b) Poultry products will continue to be safe food.
- (6) Each of us must stay informed and participate in efforts by animal health and public health authorities to **prepare but not panic** when considering the risks of a pandemic flu at this time and in the future!